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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte GERALD LIAM SWIFT

Appeal 2008-1090
Application 10/815,047
Technology Center 3700

Decided: June 17, 2008

Before WILLIAM F. PATE, III, HUBERT C. LORIN, and
LINDA E. HORNER, *Administrative Patent Judges*.

HORNER, *Administrative Patent Judge*.

DECISION ON APPEAL

Gerald Liam Swift (Appellant) seeks our review under 35 U.S.C. § 134 of the final rejection of claims 1-22.[1] We have jurisdiction under 35 U.S.C. § 6(b) (2002). We reverse.

The Appellant's claimed invention is to a linear and rotary system and method operative to control operation of an associated tool (Spec. 1:11-12). Claim 1, reproduced below, is representative of the subject matter on appeal.

> 1. A system that facilitates operation of a tool, comprising:
>
> a moveable member having a length, that moves in a rotary motion about a central axis and a linear motion along the central axis to position an associated drive member; and
>
> the drive member is parallel to the central axis, and extends the length of the moveable member to engage the tool, which drive member operates independently of the moveable member.

Claims 1-7 and 10-19 are rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 4,462,467 issued July 31, 1984 to Weingartner, and claims 8, 9, and 20-22 are rejected under 35 U.S.C. § 103(a) as unpatentable over Weingartner and U.S. Patent No. 6,216,798 issued April 17, 2001 to Riello.

The issue before us is whether the Appellant has shown that the Examiner erred in rejecting claims 1-7 and 10-19 under 35 U.S.C. § 102(b)

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[1] Claims 1-31 are pending. Claims 1-22 are finally rejected. The Examiner withdrew the sole rejection of claims 23-31 under 35 U.S.C. § 112, second paragraph (Ans. 3).

as anticipated by Weingartner and claims 8, 9, and 20-22 under 35 U.S.C. § 103(a) as unpatentable over Weingartner and Riello. This issue turns on whether Weingartner, taken alone or in combination with Riello, discloses a movable member that moves in a rotary motion about a central axis and a linear motion along the central axis to position an associated drive member.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987). Independent claim 1 recites a system that facilitates operation of a tool including "a moveable member having a length, that moves in a rotary motion about a central axis and a linear motion along the central axis to position an associated drive member." Independent claim 12 recites a method of operating a tool including "coupling a movable member to the tool" and "rotating the movable member about a central axis and moving the movable member along the central axis to position an associated drive rod."

Weingartner discloses a percussion drill machine having a drill shaft 1 rotatably supported in a housing 2 and a clamping chuck 3 rigidly supported in the drill shaft 1 (Weingartner, col. 2, ll. 47-50; Fig. 2). Weingartner further discloses a free piston 4 disposed in the drill shaft 1 that interacts with a percussion piston 5 (Weingartner, col. 2, ll. 52-53). The drill shaft 1 is caused to rotate when its bevel gear 6 meshes with a corresponding bevel gear 13 connected to an electromotor having a rotating armature 8

(Weingartner, col. 2, l. 66 – col. 3, l. 2). The percussion piston 5 is driven by a crank drive 11 connected to a separate electromotor having a rotating armature 9 (Weingartner, col. 2, ll. 62-66). When the crank drive 11 forces the percussion piston 5 downwardly, the percussion piston 5 interacts with free piston 4, forcing piston 4 downwardly, which also thereby forces drill shaft 1 downwardly (Weingartner, Fig. 2). The Examiner equated the free piston 4 with the claimed movable member and the drill shaft 1 with the claimed drive member (Ans. 3).

While the linear movement of the free piston 4 arguably "positions" the drill shaft 1, there is insufficient disclosure in Weingartner to determine whether free piston 4 "moves in a rotary motion about a central axis … to position an associated drive member." It is unclear from the disclosure in Weingartner if piston 4 is able to rotate within drill shaft 1 or how such rotary motion, if such could occur, would operate to "position" the drill shaft 1. As such, Weingartner does not disclose the movable member of claim 1 or the rotating step of claim 12, and thus does not contain adequate disclosure to anticipate independent claims 1 and 12, or claims 2-7, 11, and 13-19, which depend therefrom.

"Section 103 forbids issuance of a patent when 'the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.'" *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727,

1734 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill in the art, and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). *See also KSR*, 127 S. Ct. at 1734 ("While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.")

In rejecting claims under 35 U.S.C. § 103(a), the examiner bears the initial burden of establishing a prima facie case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992); *see also In re Piasecki*, 745 F.2d 1468, 1472 (Fed. Cir. 1984). Only if this initial burden is met does the burden of coming forward with evidence or argument shift to the appellant. *See Oetiker*, 977 F.2d at 1445; *see also Piasecki*, 745 F.2d at 1472. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. *Id.*

The Examiner relied on Riello to teach the positioning of a moveable member controlled by magnetic positioning means, as recited in claims 8, 9, and 20-22 (Ans. 4). Riello fails however to cure the deficiency in Weingartner, in that it fails to disclose the movable member of claim 1 or the rotating step of claim 12. Riello discloses a work unit for a machine tool having an outer tubular body 2 and a sleeve 3 (movable member) that slides within the body 2 along a work axis Z (Riello, col. 2, ll. 23-25). While

Riello's movable member 3 is used to position a spindle (drive member) 5, Riello fails to disclose that its sleeve 3 rotates about a central axis. As such, the Examiner has failed to set forth a prima facie case to show how the combination of Weingartner and Riello renders obvious the subject matter of claims 8, 9, and 20-22.

CONCLUSION

We conclude the Appellant has shown that the Examiner erred in rejecting claims 1-7 and 10-19 under 35 U.S.C. § 102(b) as anticipated by Weingartner and claims 8, 9, and 20-22 under 35 U.S.C. § 103(a) as unpatentable over Weingartner and Riello.

DECISION

The decision of the Examiner to reject claims 1-22 is reversed.

REVERSED

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